ABSTRACT

A apparatus for reducing a relative humidity of air inside an enclosed space comprises a portable outside air heat exchanger unit comprising a fan operative to create an air stream by drawing outside air from an intake and discharging the air stream through an outlet inside the enclosed space, and a temperature adjusting element located in the air stream.

A heating source supplies heat energy to the temperature adjusting element in response to directions from a heat controller. A humidity sensor is operative to sense the relative humidity of the air in a sensing location and to send a humidity signal to the heat

controller to change the amount of heat energy supplied to the temperature adjusting element in response to the humidity signal. HEPA filters and ultra-violet lights can shine on the air stream to kill mold spores and the like.